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# An Independent Constituent Analysis of Depictive Constructions in Japanese

Masashi Yamaguchi

## Abstract

This paper explores a theoretical account for depictive constructions in Japanese. Some previous analyses claim that depictive predicates in Japanese and their semantic DPs form a constituent, based on ellipsis phenomena. However, this paper provides several pieces of evidence showing that Japanese depictive predicates are independent of their semantic subjects. Therefore, an independent analysis should be applied to depictive constructions in Japanese. This paper argues that adjunction sites of depictive predicates are different, depending on the types of the predicates; object-oriented depictive predicates are adjoined to VP, and subject-oriented depictive predicates are either to *v*P or to TP. With this proposal, this paper demonstrates that all of the syntactic properties of depictive constructions can be accounted for, showing the plausibility of an independent constituent analysis of depictive constructions.

**Keywords:** syntax, depictive constructions, Japanese

## 1. Introduction

This paper explores the syntactic structure of depictive constructions in Japanese, examples of which are shown in (1). As in English, depictive predicates in Japanese can be classified into two types: Subject-oriented depictive predicates (SDPs), which are predicated of a subject, and object-oriented depictive predicates (ODPs), which establish a predication with an object.

- (1) a. SDPs  
Taroo-ga *hadaka-de* niku-o tabeta.  
Taroo-Nom naked meat-Acc ate<sup>1</sup>  
'Taro ate the meat naked.'  
b. ODPs  
Taroo-ga *nama-de* niku-o tabeta.  
Taroo-Nom raw meat-Acc ate  
'Taro ate the meat raw'

The syntactic structure of this construction has received attention in many previous studies (Koizumi (1994) and Kishimoto (2014), among others). Some studies argue that depictive predicates and their semantic subjects form a single constituent (Single Constituent Analysis). Others claim that both depictive predicates and their semantic subjects are employed in the derivation independently (Independent Constituent Analysis). In this paper, I provide several pieces of evidence that the Single Constituent Analysis fails to explain the syntactic behavior of depictive constructions as well as the Independent Constituent Analysis does. I particularly argue that a depictive predicate is adjoined to  $\nu$ P or TP in the case of SDPs, and to VP in the case of ODPs without forming a constituent with its semantic subject.

This paper is organized as follows. Section 2 reviews a previous analysis of Single Constituent Analysis. Section 3 presents some problems that the previous study faces, and Section 4 presents my proposal. Section 5 conducts a detailed analysis. Finally, Section 6 concludes the paper.

## 2. A Previous Study

In this section, I review Yamashita (2019), who argues that depictive predicates in Japanese and their semantic subjects form a constituent.

### 2.1 On Floating Numeral Quantifiers

Yamashita argues that depictive predicates are adjoined to their semantic subjects and form a constituent. The motivation for this argument comes from the similarity of their syntactic behavior to that of floating numeral quantifiers (FNQs) in Japanese. According to Yamashita (2016), it has been widely discussed whether or not FNQs form a constituent with their host NPs. The respective views are given in (2).

- (2) a. Single Constituent Analysis  
       FNQ and its host NP/DP form a base-generated constituent.
- b. Independent Constituent Analysis  
       FNQ and its host NP/DP do not form a base-generated single constituent; they  
       are independent constituents. (Yamashita (2016): 210)

Yamashita (2016) particularly focuses on ellipsis phenomena to argue that the Single Constituent Analysis is appropriate for capturing FNQs in Japanese.<sup>2</sup> Observe (3), which examines whether (3b-e) sentences have the same interpretation as (3a).<sup>3</sup>

- (3) Mari-wa haha-ni iPad-o 2-dai katta.  
 Mari-Top mom-Dat iPad-Acc 2-Cl bought  
 ‘Mari bought two iPads for her mother.’
- a. Ken-mo haha-ni iPad-o 2-dai katta.  
 Ken-also mother-Dat iPad-Acc 2-Cl bought  
 ‘Ken also bought 2 iPads for his mother.’
- b. Ken-mo haha-ni ~~iPad-o~~ 2-dai katta.
- c. \*Ken-mo haha-ni iPad-o ~~2-dai~~ katta.
- d. Ken-mo haha-ni ~~iPad-o 2-dai~~ katta.
- e. \*Ken-mo ~~haha-ni iPad-o 2-dai~~ katta. (Yamashita (2016): 211)

(3b) and (3c) indicate that the object *iPad-o* ‘iPad’ can undergo ellipsis, but the FNQ *2-dai* ‘2-Cl’ cannot. Yamashita claims that this contrast can be accounted for under the assumption that arguments and adjuncts show different behavior in ellipsis.

It has been argued that arguments alone can undergo ellipsis, while adjuncts by themselves cannot. This is supported by the following examples.

- (4) Taroo-wa subayaku yuka-o migaita.  
 Taroo-Top quickly floor-Acc polished  
 ‘Taro quickly polished the floor.’
- a. Hanako-mo subayaku ~~yuka-o~~ migaita.  
 Hanako-also quickly floor polished  
 ‘Hanako also quickly polished the floor.’
- b. \*Hanako-mo ~~subayaku~~ yuka-o migaita.

(4a) includes argument ellipsis, and the elided phrase can successfully be understood as *yuka-o* ‘the floor’. On the other hand, the elided adverb *subayaku* ‘quickly’ cannot be reconstructed, as shown in (4b). This difference serves as an example of argument/adjunct asymmetry. In (3c), the elided phrase *2-dai* cannot be reconstructed. This indicates that *2-dai* is actually an adverb.

The crucial part of Yamashita’s argument is the contrast between (3d) and (3e). The former example includes the deleted FNQ and the object DP modified by the FNQ, and the latter example shows the case where the FNQ and the indirect object DP *haha-ni* ‘to his mother’ are elided. Deleted elements need to form a syntactic constituent, as shown in (5).

- (5) *Context: Hanako and Momoko both know that Taro bought a book about linguistics, but only Hanako knows that he bought it yesterday.*

Hanako-wa Taro-ga kinoo gengogaku-no hon-o katta koto-o sitteiru-ga,  
Hanako-Top Taro-Nom yesterday linguistics-Gen book-Acc bought Comp-Acc know-but,  
'Hanako knows that Taro bought a book about linguistics yesterday, but'

- a. Momoko-wa Taro-ga kinoo gengogaku-no hon-o katta koto-o  
Momoko-Top Taro-Nom yesterday linguistics-Gen book-Acc bought Comp-Acc  
sira-nai.  
know-not

'Momoko does not know that Taro bought a book about linguistics yesterday.'

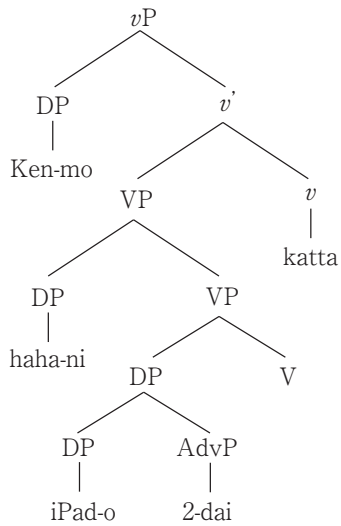
- b. \* Momoko-wa ~~Taro-ga kinoo~~ gengogaku-no hon-o katta koto-o sira-nai.  
c. Momoko-wa Taro-ga kinoo ~~gengogaku-no hon-o~~ katta koto-o sira-nai.

(5b) is illegitimate because the subject *Taro-ga* and the temporal adverb *kinoo* 'yesterday' do not form a constituent, and thus cannot be deleted together. However, (5c) is grammatical since the deleted elements *gengogaku-no* 'about linguistics' and *hon-o* 'book' form a constituent. In fact, they cannot even be separated, as in (6).

- (6) \* Gengogaku-no<sub>i</sub> Taro-ga kinoo *t<sub>i</sub>* hon-o katta.  
linguistics-Gen Taro-Nom yesterday book bought  
'About linguistics Taro bought a book yesterday.'

Based on this fact, Yamashita claims that the results of (3d) and (3e) demonstrate that the object and FNQ form a constituent, while the indirect object and FNQ do not. This is accounted for under the Single Constituent Analysis, which points that (3) has the following structure.<sup>4, 5</sup>

(7)



(cf. Yamashita (2016): 210)

As the structure above illustrates, the Single Constituent Analysis assumes that the adverbial phrase *2-dai* is adjoined to the DP it modifies, forming a constituent with it. This status as a constituent allows the phrase *iPad-o 2-dai* to undergo ellipsis, but the dative DP *haha-ni* and the adverb *2-dai* do not form a constituent, which makes it impossible to delete these elements at the same time.

## 2.2 On Depictive Constructions in Japanese

Yamashita (2019) proposes that the structure in (7) is applicable to secondary depictive predicates. He claims that depictive predicates in Japanese show the same behavior as FNQs with respect to ellipsis. The relevant examples are shown in (8).

- (8) *Context: Nao and Rei both know that Mari drank beer, but only Nao knows that Mari was naked when she drank beer.*

Nao-wa [naze nyuuyoku-go Mari-ga hadaka-de biiru-o nomu-ka-o] siitteiru-ga,  
 Nao-Top why bath-after Mari-Nom naked-DE beer-Acc drink-Q-Acc know-but  
 ‘Nao knows why Mari drinks beer naked after taking bath, but’

- a. Rei-wa [naze nyuuyoku-go Mari-ga hadaka-de biiru-o nomu-ka-o] sira-nai.  
 Rei-Top why bath-after Mari-Nom naked-DE beer-Acc drink-Q-Acc know-not  
 ‘Rei doesn’t know why Mari drinks beer naked after taking bath.’
- b. Rei-wa [naze nyuuyoku-go **Mari-ga** hadaka-de biiru-o nomu-ka-o] shira-nai.
- c. \* Rei-wa [naze nyuuyoku-go Mari-ga **hadaka-de** biiru-o nomu-ka-o] shira-nai.
- d. Rei-wa [naze nyuuyoku-go **Mari-ga hadaka-de** biiru-o nomu-ka-o] shira-nai.
- e. \* Rei-wa [naze nyuuyoku-go Mari-ga **hadaka-de biiru-o** nomu-ka-o] shira-nai.

(Yamashita (2019): 193)

(8a) includes no ellipsis, and ellipsis is applied to (8b-e). In (8b), the deleted subject can be reconstructed successfully, but the elided phrase in (8c) cannot be understood as *hadaka-de* ‘naked’ because it is an adverb. As shown in (4), adverbs alone cannot be elided. What is crucial here is the difference in grammaticality between (8d) and (8e). Yamashita claims that as with FNQs in (3), the depictive predicate *hadaka-de* and its semantic subject *Mari-ga* can be deleted simultaneously. On the other hand, (8e) is illegitimate. This suggests that the deleted DP *biiru-o* ‘beer’ and the depictive predicate *hadaka-de* are not associated with each other. Yamashita argues that these results demonstrate that depictive predicates and their semantic subjects form a single constituent.

Yamashita further claims that this claim is applicable to the case of ODPs. Observe (9).

- (9) *Context: Both Mari and Ken served sake for their mother(s). Mari served sake cold, but Ken served one warm.*

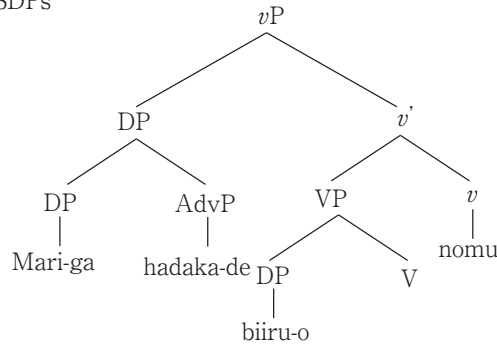
Mari-wa haha-ni sake-o hiya-de hurumatta-ga,  
 Mari-Top mother-Dat sake-Acc cold-DE served-but  
 ‘Mari served sake cold for her mother, but’

- a. Ken-wa haha-ni sake-o hiya-de hurumawa-nakat-ta.  
 Ken-Top mother-Dat sake-Acc cold-DE serve-not-Past  
 ‘Ken did not serve sake cold for his mother.’
- b. Ken-wa haha-ni **sake-o** hiyade hurumawa-nakat-ta.
- c. \* Ken-wa haha-ni sake-o **hiyade** hurumawa-nakat-ta.
- d. Ken-wa haha-ni **sake-o hiyade** hurumawa-nakat-ta.
- e. \* Ken-wa **haha-ni** sake-o **hiyade** hurumawa-nakat-ta. (Yamashita (2019): 193)

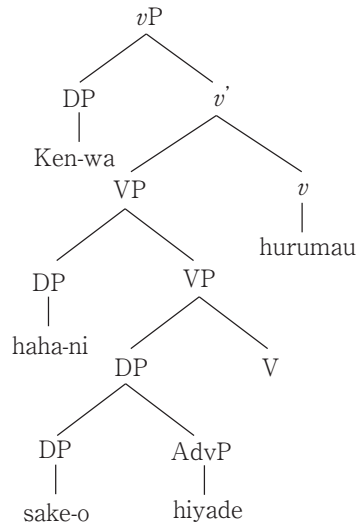
Based on (9), Yamashita claims that the ODPs *hiyade* ‘cold’ and its semantic subject *sake-o* ‘sake’ form a constituent as an argument, as in the case of SDPs in (8). These results further serve as evidence for his claim that depictive predicates in Japanese are adjoined to their semantic subjects, similarly to FNQs.

He proposes the following structures for depictive constructions in Japanese.

(10) a. SDPs



b. ODPs



(Yamashita (2019): 194)

The structures above clearly posit that depictive predicates and their host DPs form a constituent, accounting for the distribution of depictive predicates in Japanese.



### 3. Problems

Attractive though Yamashita's (2019) proposal seems, it faces certain problems regarding de-pictive predicates. This section considers both conceptual and empirical problems.

#### 3.1 A Conceptual Problem

First, considering the status of depictive predicates as adverb, it is not plausible to assume that adverbs form a constituent with nouns because adverbs modify categories other than nouns - adjectives, verbs, or clauses, for example.

(11) a. Adjectives

Taroo-wa *totemo* kinbenna gakusei da.  
 Taroo-Top very diligent student Cop  
 'Taro is a very diligent student.'

b. Verbs

Taroo-wa *subayaku* yuka-o haita.  
 Taroo-Top quickly floor-Acc swept.  
 'Taro swept the floor quickly.'

c. Clauses

*Koounnakotoni*, Taroo-wa siken-ni ukatta.  
 fortunately, Taroo-Top exam-Dat passed  
 'Fortunately, Taro passed the exam.'

d. Nouns

\* Hanako-wa *utukusiku* zyosei da  
 Hanako-Top beautifully woman Cop  
 (Intended) 'Hanako is a beautiful woman.'

The italicized words in (11) are all adverbs. Each adverb modifies the adjective *kinbenna* 'diligent', *hakita* 'swept', *kounnakotoni* 'fortunately', and *zyozei* 'woman', and the example of (11d) is ungrammatical under the intended meaning: 'Hanako is a beautiful woman'. As these examples show, nouns cannot be modified by adverbs, and it is thus unnatural to assume that adverbs and nouns to form a constituent.

## 3.2 Empirical Problems

### 3.2.1 The Crucial Paradigm

Second, the crucial paradigm for Yamashita's argument is suspect. The relevant examples are (8d, e) and (9d, e), repeated here as (12).

- (12) a. Rei-wa [naze nyuuyoku-go **Mari-ga hadaka-de** biiru-o nomu-ka-o] shira-nai.  
 b. \* Rei-wa [naze nyuuyoku-go Mari-ga **hadaka-de biiru-o** nomu-ka-o] shira-nai.  
 c. Ken-wa haha-ni **sake-o hiyade** hurumawa-nakat-ta.  
 d. \* Ken-wa **haha-ni sake-o hiyade** hurumawa-nakat-ta. (Yamashita (2019): 193)

My informants, including myself, judge all the sentences here are ungrammatical; even in (12a) and, (12c), the SDP *hadaka-de* and the ODP *hiyade* cannot be interpreted. The following examples may more clearly show the impossibility of interpreting elided depictive predicates and their semantic subjects.

- (13) a. *Context: Taro and Jiro both know that Hanako went to Kyoto, but only Taro knows that Hanako wore a kimono at that time.*

\* Taroo-wa **Hanako-ga** *kimono-sugata-de* Kyooto-ni itta koto-o sitteiru-ga,  
 Taroo-Top Hanako-Nom kimono-figure-DE Kyoto-Dat went Comp-Acc know-but  
 Jiroo-wa Kyooto-ni itta koto-o sira-nai.  
 Jiroo-Top Kyooto-Dat went Comp-Acc know-not  
 (Lit.) 'Taro knows that Hanako went to Kyoto in kimono, but Jiro does not know went to Kyoto'

- b. *Context: Taro and Hanako both bought a car from Jiro. Taro bought a used car, but Hanako bought a new car.*

\* Taroo-wa *kuruma-o tyuuko-de* Jiroo-kara katta-ga, Hanako-wa Jiroo-kara  
 Taroo-Top car-Acc used-DE Jiroo-from bought-but Hanako-Top Jiroo-from  
 kawa-na-kat-ta.  
 buy-not-Past  
 (Lit.) 'Taro bought a car used from Jiro, but Hanako did not from Jiro.'

(13a) and (13b) demonstrate that *Hanako-ga kimono-sugata-de* and *kuruma-o tyuuko-de* cannot be interpreted in the latter sentences. This fact indicates that they do not form a constituent, and a Single Constituent Analysis of depictive constructions is untenable.

### 3.2.2 The Possibility of Deleting SDPs and Objects

Third, the Single Constituent Analysis predicts that SDPs and objects cannot be deleted

simul-taneously because they are not associated with each other, and thus do not form a constituent. However, this prediction is not borne out. (14) includes a deleted SDP and object, and they can be successfully interpreted.

- (14) *Context: Taro and Hanako both drank beer, and only Hanako wore clothes when she drank beer.*

Taroo-wa hadaka-de biiru-o nonda-ga, Hanako-wa noma-nakat-ta.

Taroo-Top naked-DE beer-Acc drank-but Hanako-Top drink-not-Past

‘Taro drank beer naked, but Hanako didn’t drink.’

The latter clause of the example in (14) can be interpreted as ‘Hanako did not drink beer naked’. This result is a mystery for the Single Constituent Analysis.

### 3.2.3 The Problem of Intervention

Fourth, the following examples are difficult to capture under the Single Constituent Analysis.

- (15) a. Hanako-ga nama-de *yukkuri* niku-o tabeta.

Hanako-Nom raw-DE slowly meat-Acc ate

‘Hanako ate the meat raw slowly.’

- b. Hanako-ga *yukkuri* nama-de niku-o tabeta.

The examples in (15) show that another adverb *yukkuri* ‘slowly’ may intervene between the ODP *nama-de* and its semantic subject *niku-o*. *Yukkuri* is a verbal adverb, so that it is unnatural to assume that this adverb is also adjoined to the semantic subject of the ODP. If the Single Constituent Analysis of depictive constructions is correct, we would have to assume that the direct object, the ODP, and the adverb all form a single constituent, but this is conceptually invalid. This difference further indicates that ODPs and their semantic subjects do not form a constituent, thereby suggesting the implausibility of the Single Constituent Analysis.

The same argument is applicable to the distribution of SDPs.

- (16) a. Hanako-ga kimono-sugata-de *yuugani* odotta.

Hanako-Nom kimono-figure-DE elegantly danced

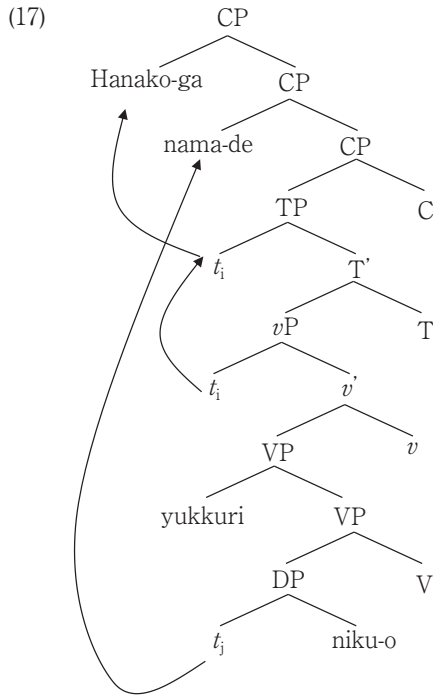
‘Hanako danced elegantly in kimono.’

- b. Hanako-ga *yuugani* kimono sugata-DE odotta.

As (16a) and (16b) show, the manner adverb *yuugani* ‘elegantly’ is allowed to disrupt the word order of the SDP *kimono-sugata-de* ‘in kimono’ and its semantic subject *Hanako*, which

indicates that SDPs and their semantic subjects do not form a constituent.

One may argue that (15) and (16) can be explained under the Single Constituent Analysis if we assume that the canonical order is (15b) and that the ODP *nama-de* scrambles out of the DP *nama-de niku-o*. However, if this explanation is on the right track, we must assume that subjects undergoes scrambling, as illustrated in (17).



The ODP *nama-de* ‘raw’ scrambles out of the DP to CP-domain, and the subject *Hanako-ga* undergoes scrambling subsequently. However, according to Saito (1985) and others, scrambling of subjects is generally prohibited in Japanese. Therefore, (17) is not the correct structure, so that we have to assume that *yukkuri* and *nama-de* are both adjoined to VP.

### 3.3 Summary

In summary, Yamashita’s claim that depictive predicates and their semantic subjects in Japanese form a constituent cannot be defended, and therefore the proposal under the Single Constituent Analysis is not adequate to explain the syntactic behavior of depictive predicates in Japanese. This suggests the need for an alternative analysis.<sup>6</sup>

## 4. Proposal

This section presents my proposal to account for the syntactic distribution of depictive predicates in Japanese. I argue that depictive predicates are syntactically separate from their semantic subjects, and thereby do not form a constituent. Therefore, the Independent Constituent Analysis is appropriate for depictive constructions in Japanese.

Along the lines of Koizumi (1994), I claim that SDPs and ODPs are adjoined to different syntactic nodes. The motivation for the difference is that they show different behavior in *vP*-fronting. The case of SDPs is illustrated in (18), where SDPs can be pied-piped with *vP* or stranded.<sup>7</sup>

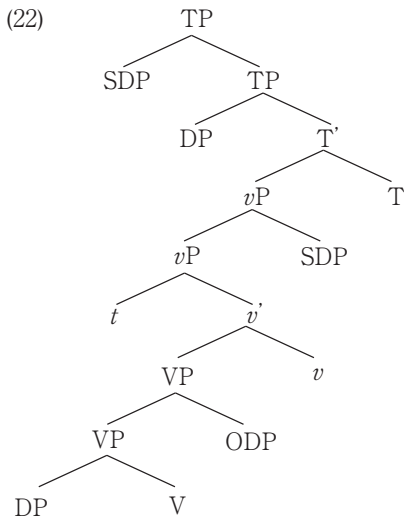
- (18) a. [<sub>vP</sub> Biiru-o nomi-sae] Taroo-ga *hadaka-de* sita.  
 Beer-Acc drink-even Taroo-Nom naked-DE did.  
 ‘Even drink beer, Taro did naked.’
- b. [<sub>vP</sub> Hadaka-de Biiru-o nomi-sae] Taroo-ga sita.  
 Naked-DE beer-Acc drink-even Taroo-Nom did  
 ‘Even drink beer naked, Taro did.’
- (19) a. \* [<sub>vP</sub> Niku-o tabe-sae] Taroo-ga nama-de sita.  
 meat-Acc eat-even Taroo-Nom raw-DE did.  
 ‘Even eat the meat, Taro did raw.’
- b. [<sub>vP</sub> Niku-o nama-de tabe-sae] Taroo-ga sita.  
 meat-Acc raw-DE eat-even Taroo-Nom did  
 ‘Even eat the meat naked, Taro did.’

These examples include *vP*-fronting. The SDP *hadaka-de* ‘naked’ can be stranded, as in (18a), or pied-piped, as in (18b). (19) shows that ODPs must be raised along with *vP*. This fact implies that ODPs must be inside *vP*, while SDPs are either in *vP* or in another projection higher than *vP*, that is, TP.

Which projections then are ODPs adjoined to, *vP* or VP? The following examples may reveal the position of ODPs.

- (20) a. Taroo-ga niku-o *nama-de* Hanako-ni *hadaka-de* okutta.  
 Taroo-Nom meat-Acc raw-DE Hanako-Dat naked presented  
 ‘Taro presented the meat raw to Hanako naked.’  
 b. ?? Taroo-ga niku-o *hadaka-de* Hanako-ni *nama-de* okutta.  
 c. Taroo-ga *hadaka-de* niku-o *nama-de* Hanako-ni okutta.  
 d. Taroo-ga *hadaka-de* niku-o Hanako-ni *nama-de* okutta.
- (21) a. [<sub>VP</sub> Niku-o *nama-de* Hanako-ni *hadaka-de* okuri-sae], Taroo-ga sita.  
 meat-Acc raw-DE Hanako-Dat naked present-even Taroo-Nom did  
 ‘Present the meat raw to Hanako naked, Taro did.’  
 b. ?? [<sub>VP</sub> Niku-o *hadaka-de* Hanako-ni *nama-de* okuri-sae], Taroo-ga sita.  
 c. [<sub>VP</sub> *Hadaka-de* niku-o *nama-de* Hanako-ni okuri-sae], Taroo-ga sita.  
 d. [<sub>VP</sub> *Hadaka-de* niku-o Hanako-ni *nama-de* okuri-sae], Taroo-ga sita.

The examples in (20) indicate that SDPs and ODPs are not totally free in their positions. In the cases where a direct object is in second position in word order, ODPs must precede SDPs; that is, the order <Direct Object-SDP-Indirect Object-ODP> is prohibited. However, when direct objects are in third position, restrictions on the word order of depictive predicates are not attested. In sentences with fronted *v*Ps, the unacceptable word order is still illegitimate, as shown in (21). This suggests that even when SDPs are adjoined to *v*P, the prohibition on the order <Direct Object-SDP-Indirect Object-ODP> still holds. In short, in order to capture the data presented here, the structure of Japanese depictive constructions should be as shown in (22). In this structure, SDPs are adjoined either to TP or to *v*P, and ODPs to VP. If objects are in second position in word order, both SDPs and ODPs are adjoined to *v*P and VP, respectively, to the right. This implies that SDPs cannot precede ODPs in this word order.



In the following section, I will demonstrate that the structure in (22) can fully account for the syntactic behavior of depictive constructions observed in Section 3.

## 5. Analysis

This section provides an analysis of the syntactic properties of depictive constructions in Japanese, which are recapitulated in (23).

- (23) a. Depictive predicates and their semantic subjects cannot be deleted.  
 b. SDPs and direct objects can be deleted.  
 c. Another adverb can intervene between depictive predicates and their semantic subjects.

These properties are successfully accounted for with the structure in (22).

### 5.1 The Impossibility of Deleting Depictive Predicates and Their Semantic Subjects

Let us start our analysis with (23a). The relevant examples are (13), repeated here in (24).

- (24) a. *Context: Taro and Jiro both know that Hanako went to Kyoto, but only Taro knows that Hanako wore kimono at that time.*

\* Taroo-wa **Hanako-ga** *kimono-sugata-de* Kyooto-ni itta koto-o sitteiru-ga,  
 Taroo-Top Hanako-Nom kimono-figure-de Kyoto-Dat went that-Acc know-but  
 Jiroo-wa Kyooto-ni itta koto-o sira-nai.  
 Jiroo-Top Kyooto-Dat went that-Acc know-not  
 (Lit.) ‘Taro knows that Hanako went to Kyoto in kimono, but Jiro does not know went to Kyoto’

- b. *Context: Taro and Hanako both bought a car from Jiro. Taro bought a used car, but Hanako bought a new car.*

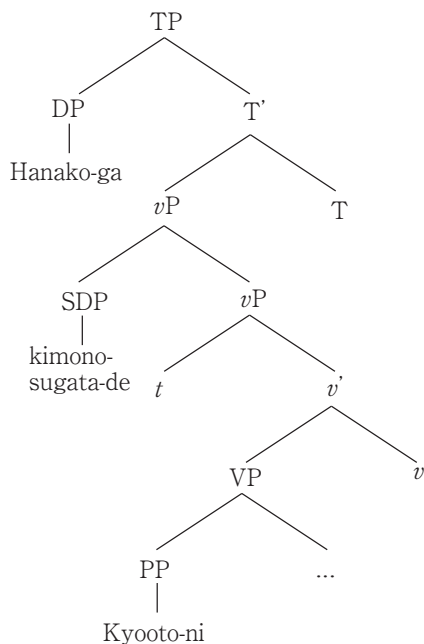
\* Taroo-wa kuruma-o tyuuko-de Jiroo-kara katta-ga, Hanako-wa Jiroo-kara  
 Taroo-Top car-Acc used-DE Jiroo-from bought-but Hanako-Top Jiroo-from  
 kawa-na-kat-ta.

buy-not-Past

(Lit.) ‘Taro bought a car used from Jiro, but Hanako did not from Jiro.’

The problem in (24) is what is deleted. In (24a), the SDP *kimono-sugata-de* ‘in kimono’ and its semantic subject *Hanako-ga* cannot undergo ellipsis because they are not in the same maximal projection. The structure of (24a) is provided in (25).

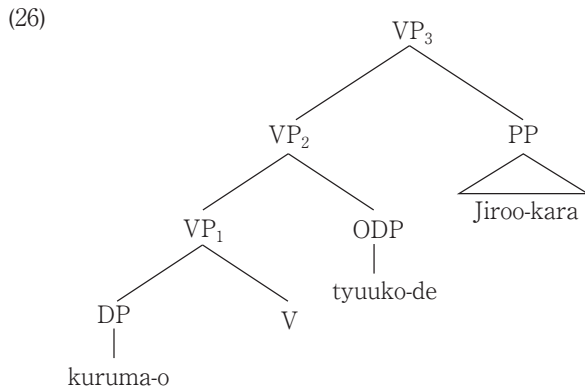
(25)





The smallest maximal projection that includes both the SDP and its semantic subject in (25) is TP. Assuming with Merchant (2001) and others that ellipsis targets maximal projections, the whole TP must be deleted to elide *Hanako-ga* and *kimono-sugata-de*. This implies that everything in TP must also be deleted. However, the presence of the PP *Kyooto-ni* and the verb *iku* ‘go’ prevents ellipsis because they cannot be stranded when TP is deleted.<sup>8</sup> The stranded PP and verb are the reason for the ungrammaticality of (24a).

Almost exactly the same account applies to (24b), which includes the deletion of ODP and the direct object. As we have observed, ODPs are adjoined to VP. In this case, both ODP *tyuuko-de* ‘used’ and its semantic subject *kuruma-o* ‘a car’ are both in VP, so it would seem that they could be successfully elided. However, this is not the case, as shown in (24b). This ungrammaticality is due to the existence of the PP *Jiroo-kara*. The structure of (24b) is shown in (26).



The structure in (26) includes two adjuncts both adjoined to VP. If ellipsis is applied to VP, then the whole VP, namely VP<sub>3</sub>, has to be deleted because the intermediate projections VP<sub>1</sub> and VP<sub>2</sub> alone do not count as maximal projections. However, (24b) includes *Jiroo-kara* ‘from Jiro’, which indicates that VP<sub>2</sub> is deleted. Since VP<sub>2</sub> is not a maximal projection that can undergo ellipsis, (24b) is ruled out.

The explanation here predicts that ODPs and their semantic subject can undergo ellipsis when the sentence includes no other adjunct. This prediction is borne out.

(27) Taroo-ga niku-o nama-de tabeta-si, Hanako-mo tabeta.

Taroo-Nom meat-Acc raw-DE ate-and Hanako-also ate

‘(Lit.) ‘Taro ate the meat raw, and Hanako also ate.’

The latter clause of (27) can be interpreted as *Hanako also ate the meat naked*. This interpretation can be obtained when the whole VP is deleted. This data can also be explained under my proposal.

## 5.2 The Ellipsis of SDPs and Direct Objects

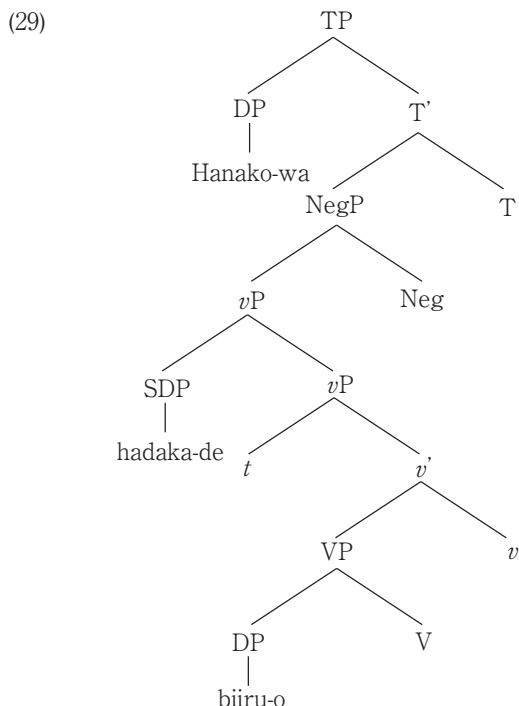
Let us move on to (23b). As we have observed in (14), SDPs and direct objects can be deleted. Witness (28).

(28) Taroo-wa hadaka-de biiru-o nonda-ga, Hanako-wa noma-nakat-ta (= (14)).

Taroo-Top naked-DE beer-Acc drank-but Hanako-Top drink-not-Past

‘(Lit.) ‘Taro drank beer naked, but Hanako didn’t drink.’

The latter clause of this example can be interpreted as ‘Hanako didn’t drink beer naked’. This can be explained under the Independent Constituent Analysis. My proposal assumes that depictive predicates and their semantic subjects do not form a constituent, and that depictive predicates are adjoined to a maximal projection that differs depending on which noun a depictive predicate is predicated of. Since depictive predicates and their semantic subjects do not form a constituent, they can undergo a syntactic operation independently. In the case of (28), the structure is illustrated in (29).<sup>9</sup>



If *vP* is assumed to be responsible for the ellipsis in (28), we can explain why the latter clause of (28) can be interpreted with the SDP *hadaka-de* and the direct object *biiru-o*: The *vP* includes both *hadaka-de* and *biiru-o*, so the deletion of the *vP* renders the interpretation ‘Hanako didn’t drink beer naked’ possible.

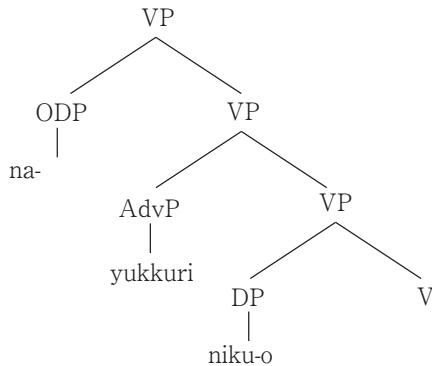
### 5.3 The Intervention of Another Adverb

We finally focus on the property in (23)c that another adverb can intervene between depictive predicates and their semantic subjects. The examples are (15), repeated here as (30).

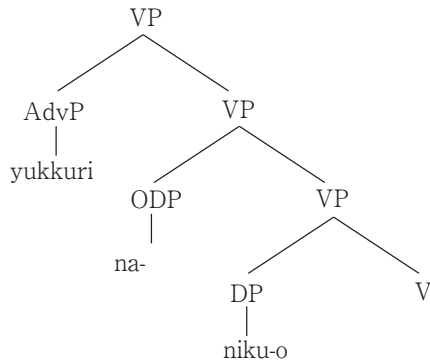
- (30) a. Hanako-wa nama-de *yukkuri* niku-o tabeta.  
 Hanako-Top raw-DE slowly meat-Acc ate  
 ‘Hanako ate the meat raw slowly.’  
 b. Hanako-wa *yukkuri* nama-de niku-o tabeta.

The adverb *yukkuri* ‘slowly’ intervenes between the ODP *nama-de* ‘raw’ and the object *niku-o* ‘the meat’. The Independent Analysis can easily provide an account of these data. Since the adverb modifies the verb phrase, it is reasonable to assume that *yukkuri* is adjoined to VP or to *vP*. As both *yukkuri* and the ODP *nama-de* adjoined to VP, their order can be reversed, as shown in (31).

- (31) a. ODP-Adv-Obj



- b. Adv-ODP-Obj



Because *yukkuri* and *nama-de* are independently adjoined to VP, the reversed word order is possible.

## 6. Conclusion

In conclusion, the Independent Constituent Analysis appropriately accounts for the syntactic behavior of depictive constructions in Japanese. This paper has provided empirical evidence for the Independent Constituent Analysis of depictive constructions in Japanese, and since depictive predicates and their semantic subjects in Japanese show some restrictions on ellipsis and constituency that cannot be captured under the Single Constituent Analysis, the Single Constituent Analysis should not be pursued in depictive constructions.

To close this paper, I must mention that a difficulty remains regarding the ellipsis of ODPs. Observe (32).

(32) *Context: Taro and Hanako both bought a car from Jiro. Taro bought a used car, but Hanako bought a new car.*

- a. \*Taroo-wa kuruma-o tyuuko-de Jiroo-kara katta-ga, Hanako-wa Jiroo-kara  
Taroo-Top car-Acc used-DE Jiroo-from bought-but Hanako-Top Jiroo-from  
kawa-na-kat-ta.

buy-not-Past

(Lit.) ‘Taro bought a car used from Jiro, but Hanako did not from Jiro.’

- b. Taroo-wa kuruma-o tyuuko-de Jiroo-kara katta-si, Hanako-mo Jiroo-kara  
Taroo-Top car-Acc used-DE Jiroo-from bought-and Hanako-also Jiroo-from  
katta.

bought

(Lit.) ‘Taro bought a car used from Jiro, and Hanako also bought.’

We have observed that (32a) is ungrammatical because the PP *Jiroo-kara* ‘from Jiro’ hinders ellipsis. What is interesting here is that (32b), which is an affirmative version of (32a), is grammatical. This result is unpredictable because what is deleted in (32b) is the same as in (32a). Negation or the additive particle *mo* ‘also’ may play a crucial role here. As a syntactic analysis may not be appropriate for explaining the difference between (32a) and (32b), and a solution should be pursued from the semantic viewpoint. I will leave this problem for future research.

## Notes

1) Abbreviations are as follows:

Acc: Accusative

Cl: Classifier

Comp: Complementizer

Dat: Dative

DE: a suffix for depictive predicates

Gen: Genitive

Nom: Nominative

Top: Topic

2) Yamashita (2016) actually provides another piece of evidence for the Single Constituent Analysis for FNQs in terms of scrambling, but this paper does not introduce these data because Yamashita (2019) does not apply the scrambling test for depictive predicates.

3) White bold letters indicate ellipsis.

4) Yamashita (2016) uses, instead of AdvP, Cl(assifier)P, which is headed by a classifier taking a Num(ber)P as its complement, but since the internal structure of FNQs is not relevant to this paper, I use AdvP as in Yamashita (2019).

5) This paper employs DP to refer to noun phrases because the distinction between DP and NP is immaterial to this paper.

6) Note that this paper does not intend to argue against Yamashita's (2016) proposal for FNQs because they in fact show some properties of forming a constituent with their host NPs.

7) See Takita (2016) for the derivation of *v*P-fronting.

8) One might wonder where the verb stays in (29). I assume with Funakoshi (2012) that a verb moves to T from *v* via head-movement in the case of verb phrase ellipsis. See Funakoshi (2012) for details.

9) The subject *Hanako-wa* may be Spec, TopicP, which is a higher projection than TP because its case is realized as *-wa*. However, the position of the subject is not directly relevant, so I put the subject in Spec, TP.

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